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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,391	05/09/2001	Yoshiaki Moriyama	041465-5111	3429

55694 7590 11/20/2006

DRINKER BIDDLE & REATH (DC)
1500 K STREET, N.W.
SUITE 1100
WASHINGTON, DC 20005-1209

EXAMINER	
LANIER, BENJAMIN E	
ART UNIT	PAPER NUMBER
2132	

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/851,391	MORIYAMA ET AL.	
	Examiner	Art Unit	
	Benjamin E Lanier	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5,12,19,22,25 and 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,12,19,22,25 and 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed 04 October 2004 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: wherein in the recording process and the reproducing process, the descramble system applying step applies one type of the descramble system to the information signal with the second copy control information and applies the other types of the descramble systems to the information with first copy control information. The specification discloses that the descramble system of the recording apparatus uses descramble systems C & E only (Page 32, lines 17-20). The descramble system of the reproducing apparatus uses descramble systems A & B only (page 37, lines 10-15). Therefore it is unclear how the descramble systems of both the recording process and the reproducing process could use the same descramble system on information having a specific copy control code since they do not use the same descramble systems. For the purposes of examination the claim limitation will be treated as different descramble systems being used on information signals having different copy control codes, irrespective of the process.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

2. Applicant's arguments, filed 04 October 2006, with respect to the amended claim language have been fully considered and are persuasive. Therefore, the rejection has been

withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Litsuka by U.S. Patent No. 6,462,151.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The added material which is not supported by the original disclosure is as follows: wherein in the recording process and the reproducing process, the descramble system applying step applies one type of the descramble system to the information signal with the second copy control information and applies the other types of the descramble systems to the information with first copy control information. The specification discloses that the descramble system of the recording apparatus uses descramble systems C & E only (Page 32, lines 17-20). The descramble system of the reproducing apparatus uses descramble systems A & B only (page 37, lines 10-15). Therefore it is unclear how the descramble systems of both the recording process and the reproducing process could use the same descramble system on information having a specific copy control code since they do not use the same descramble systems.

5. Claims 2 and 3 are rejected based upon their dependence on claim 1.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 25, 28 are rejected under 35 U.S.C. 102(e) as being Litsuka by U.S. Patent No. 6,462,151. Referring to claim 25, Litsuka discloses a copy protection system wherein the encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of a discriminating step of discriminating the type of the scramble system of the read information signal and the type of the copy control information of the read information signal. That data includes a Sy field that identifies the copy control information (Figure 6). One of the copy control codes specifies copy prohibited (Col. 15, lines 30-40), which meets the limitation of a forbidding reproducing step of forbidding reproducing the read information signal when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information does not coincide with a selected condition, wherein the selected condition includes combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path. The copy control codes include '10' for copy once (Col. 2, lines 2-3) and '11' for copy prohibited (Col. 2, lines 3-4), which meets the limitation of the copy control information including first copy control information indicating permission to copy the information signal only once and second copy control information

indicating prohibition of copying the information signal after the information signal is copied once. The encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of the scramble system applied to the information signal with the first copy control information is different from a scramble system which is applied to the information signal with the second copy control information.

Referring to claim 28, Litsuka discloses a copy protection system wherein the encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of a discriminating device for discriminating the type of the scramble system of the read information signal and the type of the copy control information of the read information signal. That data includes a Sy field that identifies the copy control information (Figure 6). One of the copy control codes specifies copy prohibited (Col. 15, lines 30-40), which meets the limitation of a forbidding reproducing device for forbidding reproducing the read information signal when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information does not coincide with a selected condition, wherein the selected condition includes combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path. The copy control codes include '10' for copy once (Col. 2, lines 2-3) and '11' for copy prohibited (Col. 2, lines 3-4), which meets the limitation of the copy control information including first copy control information indicating permission to copy the information signal only once and second copy control information

indicating prohibition of copying the information signal after the information signal is copied once. The encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of the scramble system applied to the information signal with the first copy control information is different from a scramble system which is applied to the information signal with the second copy control information.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 5, 12, 19, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Litsuka by U.S. Patent No. 6,462,151. Referring to claim 5, Litsuka discloses a copy protection system wherein the encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of a discriminating step of discriminating the type of the scramble

system of the read information signal and the type of the copy control information of the read information signal, a scramble system applying step of applying a scramble system to the descrambled information signal and producing a scrambled output when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information coincides with a selected condition. That data includes a Sy field that identifies the copy control information (Figure 6). When the arrangement changing the encryption algorithm is applied, decryption information is the order of encryption processes or the number of loops (Col. 15, lines 10-14), which meets the limitation of a descramble system applying step of applying descramble systems to the inputted information signal, the descramble systems including a plurality of kinds of descramble systems. One of the copy control codes specifies copy prohibited (Col. 15, lines 30-40), which meets the limitation of wherein the selected condition includes combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path. The copy control codes include '10' for copy once (Col. 2, lines 2-3) and '11' for copy prohibited (Col. 2, lines 3-4), which meets the limitation of the copy control information including first copy control information indicating permission to copy the information signal only once and second copy control information indicating prohibition of copying the information signal after the information signal is copied once. The encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of the descramble system applying step applies one type of the descramble system to a scramble system of the information signal with the second control information and applies the

other types of the descramble systems to scramble systems of the information signal with the first copy control information, the scramble system applied to the information signal with the first copy control information is different from a scramble system which is applied to the information signal with the second copy control information. Litsuka does not disclose that the data is encrypted before it is recorded. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to encrypt the data prior to recording in the scenario where the received data contains the 'copy only once' copy control code (Col. 2, lines 1-3), because the resultant recorded data would have a copy control code of 'copy prohibited' since the single copy has been made, and Litsuka discusses that data should be encrypted if the data protection information indicates 'copy only once' or 'copy prohibited' (Col. 2, lines 17-20).

Referring to claim 12, Litsuka discloses a copy protection system wherein the encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of a discriminating device for discriminating the type of the scramble system of the read information signal and the type of the copy control information of the read information signal, a scramble system applying device for applying a scramble system to the descrambled information signal and producing a scrambled output when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information coincides with a selected condition. That data includes a Sy field that identifies the copy control information (Figure 6). When the arrangement changing the encryption algorithm is applied, decryption information is the order of encryption processes or the number of loops (Col. 15, lines 10-14), which meets the limitation of a descramble system applying device applying descramble systems to the inputted

information signal, the descramble systems including a plurality of kinds of descramble systems. One of the copy control codes specifies copy prohibited (Col. 15, lines 30-40), which meets the limitation of wherein the selected condition includes combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path. The copy control codes include '10' for copy once (Col. 2, lines 2-3) and '11' for copy prohibited (Col. 2, lines 3-4), which meets the limitation of the copy control information including first copy control information indicating permission to copy the information signal only once and second copy control information indicating prohibition of copying the information signal after the information signal is copied once. The encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of the descramble system applying step applies one type of the descramble system to a scramble system of the information signal with the second control information and applies the other types of the descramble systems to scramble systems of the information signal with the first copy control information, the scramble system applied to the information signal with the first copy control information is different from a scramble system which is applied to the information signal with the second copy control information. Litsuka does not disclose that the data is encrypted before it is recorded. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to encrypt the data prior to recording in the scenario where the received data contains the 'copy only once' copy control code (Col. 2, lines 1-3), because the resultant recorded data would have a copy control code of 'copy prohibited' since the single copy has been made, and Litsuka discusses that data

should be encrypted if the data protection information indicates 'copy only once' or 'copy prohibited (Col. 2, lines 17-20).

Referring to claim 19, Litsuka discloses a copy protection system wherein the encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of a discriminating step of discriminating the type of the scramble system of the read information signal and the type of the copy control information of the read information signal, a scramble system applying step of applying a scramble system to the descrambled information signal and producing a scrambled output when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information coincides with a selected condition. That data includes a Sy field that identifies the copy control information (Figure 6). When the arrangement changing the encryption algorithm is applied, decryption information is the order of encryption processes or the number of loops (Col. 15, lines 10-14), which meets the limitation of a descramble system applying step of applying descramble systems to the inputted information signal, the descramble systems including a plurality of kinds of descramble systems. One of the copy control codes specifies copy prohibited (Col. 15, lines 30-40), which meets the limitation of wherein the selected condition includes combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path. The copy control codes include '10' for copy once (Col. 2, lines 2-3) and '11' for copy prohibited (Col. 2, lines 3-4), which meets the limitation of the copy control information including first copy control information indicating permission to copy the information signal only once and second copy

control information indicating prohibition of copying the information signal after the information signal is copied once. The encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of the descramble system applying step applies one type of the descramble system to a scramble system of the information signal with the second control information and applies the other types of the descramble systems to scramble systems of the information signal with the first copy control information, the scramble system applying step applies two different kinds of scramble systems to the information with the first copy control information, and the to the information with the second copy control information. Litsuka does not disclose that the data is encrypted before it is recorded. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to encrypt the data prior to recording in the scenario where the received data contains the 'copy only once' copy control code (Col. 2, lines 1-3), because the resultant recorded data would have a copy control code of 'copy prohibited' since the single copy has been made, and Litsuka discusses that data should be encrypted if the data protection information indicates 'copy only once' or 'copy prohibited' (Col. 2, lines 17-20).

Referring to claim 22, Litsuka discloses a copy protection system wherein the encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of a discriminating device for discriminating the type of the scramble system of the read information signal and the type of the copy control information of the read information signal, a scramble system applying device for applying a scramble system to the descrambled information signal

and producing a scrambled output when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information coincides with a selected condition. That data includes a Sy field that identifies the copy control information (Figure 6). When the arrangement changing the encryption algorithm is applied, decryption information is the order of encryption processes or the number of loops (Col. 15, lines 10-14), which meets the limitation of a descramble system applying device for applying descramble systems to the inputted information signal, the descramble systems including a plurality of kinds of descramble systems. One of the copy control codes specifies copy prohibited (Col. 15, lines 30-40), which meets the limitation of wherein the selected condition includes combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path. The copy control codes include '10' for copy once (Col. 2, lines 2-3) and '11' for copy prohibited (Col. 2, lines 3-4), which meets the limitation of the copy control information including first copy control information indicating permission to copy the information signal only once and second copy control information indicating prohibition of copying the information signal after the information signal is copied once. The encryption algorithm applied to the transmission of data is changed depending on the management information of the data to be transmitted (Col. 14, lines 45-50), which meets the limitation of the descramble system applying step applies one type of the descramble system to a scramble system of the information signal with the second control information and applies the other types of the descramble systems to scramble systems of the information signal with the first copy control information, the scramble system applying step applies two different kinds of scramble systems to the information with the

first copy control information, and the to the information with the second copy control information. Litsuka does not disclose that the data is encrypted before it is recorded. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to encrypt the data prior to recording in the scenario where the received data contains the 'copy only once' copy control code (Col. 2, lines 1-3), because the resultant recorded data would have a copy control code of 'copy prohibited' since the single copy has been made, and Litsuka discusses that data should be encrypted if the data protection information indicates 'copy only once' or 'copy prohibited' (Col. 2, lines 17-20).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E. Lanier whose telephone number is 571-272-3805. The examiner can normally be reached on M-Th 7:30am-5:00pm, F 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin E. Lanier

GILBERTO BARRON JR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100